

# MIO AV-HDMI/DVI CVBS to HDMI/DVI converter V3.4 User Manual



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#### **Description**

MIO AV-HDMI/DVI is a miniature high quality video/audio interface converting analog composite video signal to digital RGB (DVI-D/HDMI) for LCD or PDP.

MIO AV-HDMI/DVI supports video and audio monitor and alarm indicator, supports 4:3, 16:9 and full screen output mode. The signal's UMD, Tally and VU indicator position can be set freely. MIO AV-HDMI/DVI fully supports WEBSERVER, by which configuration and operation can be done conveniently. MIO AV-HDMI/DVI is a cost-effective device for constructing video/audio monitoring or display system.

#### Features 1 4 1

Analog composite video signal input

Video and audio signal auto detecting and alarming, such as video/audio lost, frozen, black video, and audio mute

Programmable UMD name

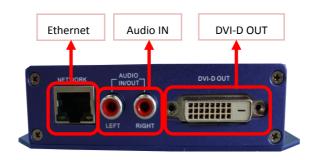
Four channel VU meters indication

Built-in WEBSERVER

4:3, 16:9 and full screen display modes support

# Panel Description:

### **RIGHT PANEL INTERFACE:**



#### Output resolution:

1024x768x60p, 1280x768x60p 1280x720x60p, 1280x800x60p 1280x1024x60p, 1366x768x60p, 1400x1050x60p, 1680x1050x60p 1920x1080x50p, 1920x1080x60p

Network: Default IP address is 192.168.1.76

#### **LEFT PANEL INTERFACE:**



CVBS IN: Support PAL standard

**GPI IN**: GPI signal is a trigger signal, which used to indicate TALLY. The tripper level is 3.3V (The input level should lower than 3.3V).

Power: 9VDC, 1.6A

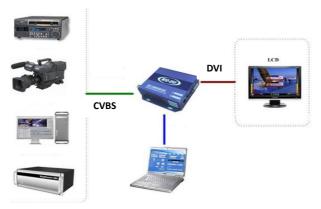
#### THE CONTROL OF TOP PANEL



**LOAD DEFAULT:** Return to Default factory Parameters. The parameters on the web page will be restored to default ones, including IP address (192.168.1.76) ,Mac address and user password (000000).

**RESOLUTION**: Output Resolution Select. The selection of resolution is among 1024x768x60p, 1280x720x60p, 1280x768x60p.

# How to connect the device



### WEB control software instructions

Connect the output lines, input lines and the current network must be 100M

### How To Use The Remote Control Software

#### ATTENTION BEFORE USE:

MIO AV-HDMI/DVI has a built-in WEBSERVER, so user could deploy it by Internet Explore easily if connect it through CAT5 cable.

The default IP address: 192.168.1.76.

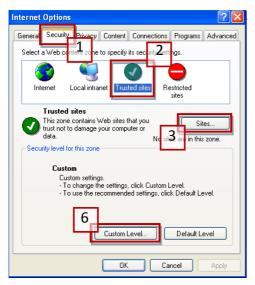
The default user name: admin

The default password: 000000

Before you open the Internet Explore, please ensure your Internet Explore has been configured follow the step:

The methods to install Text ActiveX plug if there are needed.

Double click IE, choose Tools/ Internet Options, and then appear the dialog below.

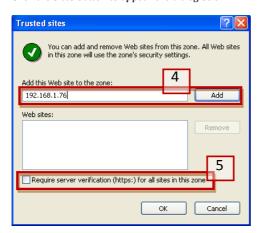


You can configure the Web following a few steps below:

Choose Security label.

Click trusted sites.

Click the Sites button to appear the dialog below.



Add this Web Site to the zone, and then click Add button.

Please do **not** check the box which requires server verification (https:) for all sites in this zone. Then click OK.

Click the Custom Level button to appear the dialog below.



Enable "Download unsigned ActiveX controls".

Enable "Initialize and script ActiveX controls not marked as safe".

Enable "Run ActiveX controls and plug-in".



Input "192.168.1.76/dvipro.cab" in the address bar of IE, and press Enter. Here appears a pop-up dialog box, which is required to save the CAB files. Choose the route to save it in the local disk. After extracting the file folder, run the install file inside it. The install is successful when the window below appears.



After finish the entire settings, click OK to exit Internet Options. Then open the IE Brower again. Now you can upload the text successfully.

# Login

The default user name: admin. The default password: 000000.

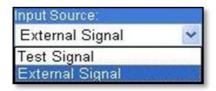


#### SYSTEM SETTINGS

There are several basic parameters on the left part of web page. Adjust these parameters if needed. Click the Submit button to ensure the adjusted parameters take effect.

#### INPUT SOURCE

Select the video type between the External Signal (CVBS) and the test signal generated by this machine.

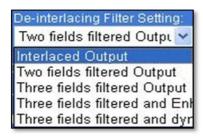


#### **DE-INTERLACING FILTER SETTINGS**

This function is suitable for high-end customs to make motion video played smoothly without tailing and saw tooth.

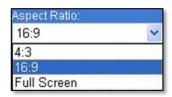
The function includes interlaced output, two fields filtered output, and three fields filtered output, three fields filtered and enhanced output, three fields filtered and dynamic enhanced output.

Click the submit button to take effect.



#### ASPECT RATIO

Aspect ratio contains 4:3, 16:9, and full screen.





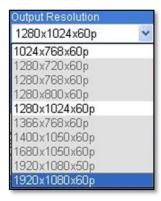
4:3 MIO AV-HDMI/DVI output display



16:9 MIO AV-HDMI/DVI output display

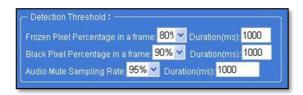
#### **OUTPUT RESOLUTION**

There are several output resolutions provided by this machine. The max one is up to 1920x1080px60Hz. It supports LCD EDID detection. The matched ones are highlighted with white area. The system will monitor the best matched resolutions of display screen automatically, and sets the ultimate one as the output resolution in the template.



#### VIDEO/AUDIO ALARM DETECTION THRESHOLD

Set the detection threshold according the needs to alarm of video frozen, video black and audio mute. The device also provides the detection of video losing, audio overload, and audio losing.



#### **Position of Audio Meters Settings**

Adjust the position of left and right audio meters by entering an X-axis value and a Y-axis value. The origin point starts on the upper left corner of the screen.



#### Position of the Video Window Settings

Adjust the position of video window by entering an X-axis value and a Y-axis value. The origin point starts on the upper left corner of the screen.



#### Design UMD

This area includes 2 parts: one is character editing area, and the other one is preview area. You can create characters, edit the size and color, and preview the UMD effect real time.



#### To create the UMD

Type the characters in content, change the size, the font and the color of characters. The effects will be show in effect preview. Upload characters after all parameters be settled and all characters will be applied in UMD.



#### To clear the UMD

Clear up all characters or enter a "Space", there is no character in image preview area, click "Upload", the character in UMD area will be cleared.

#### **Change UMD Background**

The UMD picture allowed to upload is 32bits TGA format with Alpha channel. The size of picture is 720x60 pixels. You can change the UMD background picture freely.



# Tally Display Setting

Click the "Tally display", only when there is a tally signal input, the output image will be displayed at both ends of Tally red region. If users do not click the "Tally display", no matter whether there is a tally signal input, the region does not turn red.



Tally shows effect:



# **Save Configuration Template**

Users can configure 3 templates with different settings for different use, to suit multiple devices work in the same environment. Users do not need to modify the configuration every time. Just click the button, corresponding template will be applied.



#### **USER MANAGEMENT**





The software provides password-protected function, the initial password is 000000. Users can modify the password; maximum password length is 12 bits. When you modify the password successfully, information will prompt as "The password is altered successfully. It will take effect when you login next time."

#### **NETWORK Settings**



Modify the IP address, if modify successfully, the information prompts as "Network has been configured successfully; please turn down the power and restart the device again." Restart the mini box, enter the new IP address in IE address bar and the web software will be opened. The initial IP address is: 192.168.1.76.

The physical MAC address can be modified too. In the network, each network device has only one physical address. When the physical addresses of the two devices are in conflict, users are able to use this feature to change the MAC address number.

User can also upgrade system under this label. Power and network cannot be cut off during

upgrading. When system is upgraded successfully, please turn off the power and restart the device.

# The Default Template Configuration

#### **Configuration Template NO.1**

Video input=External signal

Output Resolution=1280x1024x60p

De-interlacing= three fields filtered and Enhanced Output

Output ratio: 4:3

Top Coordinates of left Audio Meter

x=8;

y = 10;

Top Coordinates of right Audio Meter

x = 782

y=10;

Position of the Playback Window

Top Coordinates of Playback Window

x = 60

y = 10

Frozen Pixel Percentage in a frame =80

Duration=1000ms

Audio Mute Sampling Rate = 95

Duration=1000ms

# **Configuration Template NO.2**

Video input=External signal

Output Resolution=1280x1024x60p

De-interlacing= three fields filtered and Enhanced Output

Output ratio: 16:9

Top Coordinates of left Audio Meter

x = 766;

y = 20;

Top Coordinates of right Audio Meter

x = 854

y = 20;

Position of the Playback Window

Top Coordinates of Playback Window

x=2

y=1

Frozen Pixel Percentage in a frame =80

Duration=1000ms

Audio Mute Sampling Rate =95

Duration=1000ms

### **Configuration Template NO.3**

Video input=External signal

Output Resolution=1280x1024x60p

De-interlacing= three fields filtered and Enhanced Output

Output ratio: full screen

Frozen Pixel Percentage in a frame =80

Duration=1000ms

Audio Mute Sampling Rate =95

Duration=1000ms

#### Technical Parameters:

### Video input

Input interface: 1\*BNC connector, CVBS

Impedance: 75 ohms

Standard: PAL

Return loss: > 40dB -5.8MHz

# Digital video output

Output interface: 1\*DVI-D

Output resolutions:

1024x768x60p 1280x720x60p

1280x768x60p 1280x800x60p

1280x1024x60p 1366x768x60p

1400x1050x60p 1680x1050x60p

1920x1080x50p 1920x1080x60p

#### Analog audio input

Input interface: 2\*RCA connector

Max level: +24dBu

Sample rate: 48 KHz

SNR: >80dB

THD+N: -90dB @ 1 KHz

Connector: RJ45

Interface rate: 10/100M self-adaptive

# **Physics**

Size: 120 X 95 X 27 mm

Work Temperature: 0-35 °C

Power: DC 9V 1.6 A

1. In order to avoid network traffic congestion, please do not submit parameters before the

first modification is applied.

2. In order to avoid hardware loose contact caused by continuous operations on the front

panel, please do your second operation after you have got the first operation result.

3. Generally, it will spend about three seconds to get the results after you submit. The time

is related with the monitor type. If the time is too long (over 7seconds), maybe there is

something abnormal with the hardware's working status (overheating for example),

please wait patiently.

4. Do not plug the DVI connector without power-down.

#### Contact Us

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